

NATIONAL NANOTECHNOLOGY INITIATIVE Research and Development Funding in the President's 2008 Budget

The President's 2008 Budget provides \$1.45 billion for the multi-agency National Nanotechnology Initiative (NNI), bringing the total investment since the initiative was established in 2001 to over \$8.3 billion and more than tripling the annual investment of the first year of the Initiative. This sustained investment is advancing our understanding of the unique phenomena and processes that occur at the nanometer scale and expediting the responsible use of this knowledge to achieve advances in medicine, manufacturing, high-performance materials, information technology, and energy and environmental technologies.

The NNI advances the discovery, development, and utilization of nanotechnology by funding cutting-edge research, creating multidisciplinary centers of excellence, and developing research and education infrastructure. It also supports activities aimed at addressing the societal implications of nanotechnology, including those related to ethical, legal, human and environmental health, and workforce issues.

Critical, broad-ranging investments continue to be made by NSF, reflecting the agency's mission in supporting fundamental research across all disciplines of science and engineering, whereas the DoD investment emphasizes development of materials, devices, and systems that address the department's mission. DOE will begin operations at the last of five Nanoscale Science Research Centers that make research equipment and infrastructure available to investigators from across the scientific research community. Funding at HHS includes programs at several NIH institutes emphasizing nanotechnology-based biomedical advances occurring at the intersection of biology and the physical sciences as well as programs to understand biological interactions with nanoscale materials. The HHS request also includes programs at the National Institute of Occupational Safety and Health (NIOSH) that address implications and applications of nanotechnology for health and safety in the workplace. Funding at USDA includes programs at the Cooperative State Research, Education, and Extension Services (CSREES) and Forest Service.

National Nanotechnology Initiative (dollars in millions)

| | 2001 Actual | 2007 Estimate * | 2008 Proposed | Dollar Change 2001 to 2008 | % Change 2001 to 2008 |
|-----------------------------|----------------|--------------------|------------------|-------------------------------|--------------------------|
| National Science Foundation | 150 | 373 | 390 | 240 | 160% |
| Defense | 125 | 417 | 375 | 250 | 200% |
| Energy ** | 88 | 293 | 332 | 244 | 277% |
| Health & Human Services ** | 40 | 175 | 208 | 168 | 420% |
| Commerce (NIST) | 33 | 89 | 97 | 64 | 194% |
| NASA | 22 | 25 | 24 | 2 | 9% |
| EPA | 5 | 9 | 10 | 5 | 100% |
| Agriculture ** | 0 | 7 | 8 | 8 | NA |
| Homeland Security | 0 | 1 | 1 | 0 | NA |
| Justice | 1 | 1 | 1 | 1 | 0% |
| Transportation | 0 | 1 | 1 | 1 | NA |
| TOTAL | 464 | 1,391 [†] | 1,447 | 983 | 212% |

^{*} The amounts included as 2007 Estimates reflect the 2007 Budget levels, with the exception of the numbers for the Departments of Defense and Homeland Security, which are the enacted levels

In addition to supporting the development of nanotechnology for beneficial uses, the NNI funds research on the human and environmental health implications of nanotechnology and methods for managing potential risks. Programs in this area are funded by EPA, NSF, HHS, NIST, DOE, DoD, and USDA.

Additional information about the NNI is available at www.nano.gov.

^{** 2007} and 2008 funding levels for: DOE includes Basic Energy Sciences and Energy Efficiency and Renewable Energy; HHS includes NIH and NIOSH funding; and USDA includes CSREES and Forest Service.

^{† 2007} estimate includes about \$100 million in Congressional earmarks at DoD that are outside the NNI plan.